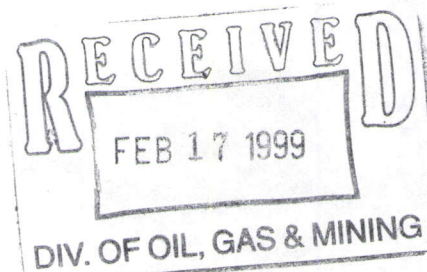


**BLACKHAWK ENGINEERING, INC.**

214 East 1st. North - Price, Utah 84501 - Telephone (801) 637-2422 • Fax (801) 637-2431

S/015/077

FAX



TO:

Tony Salinas

PHONE:

1-801-538-5340

FAX #:

1-801-359-3940

FROM:

Tommy

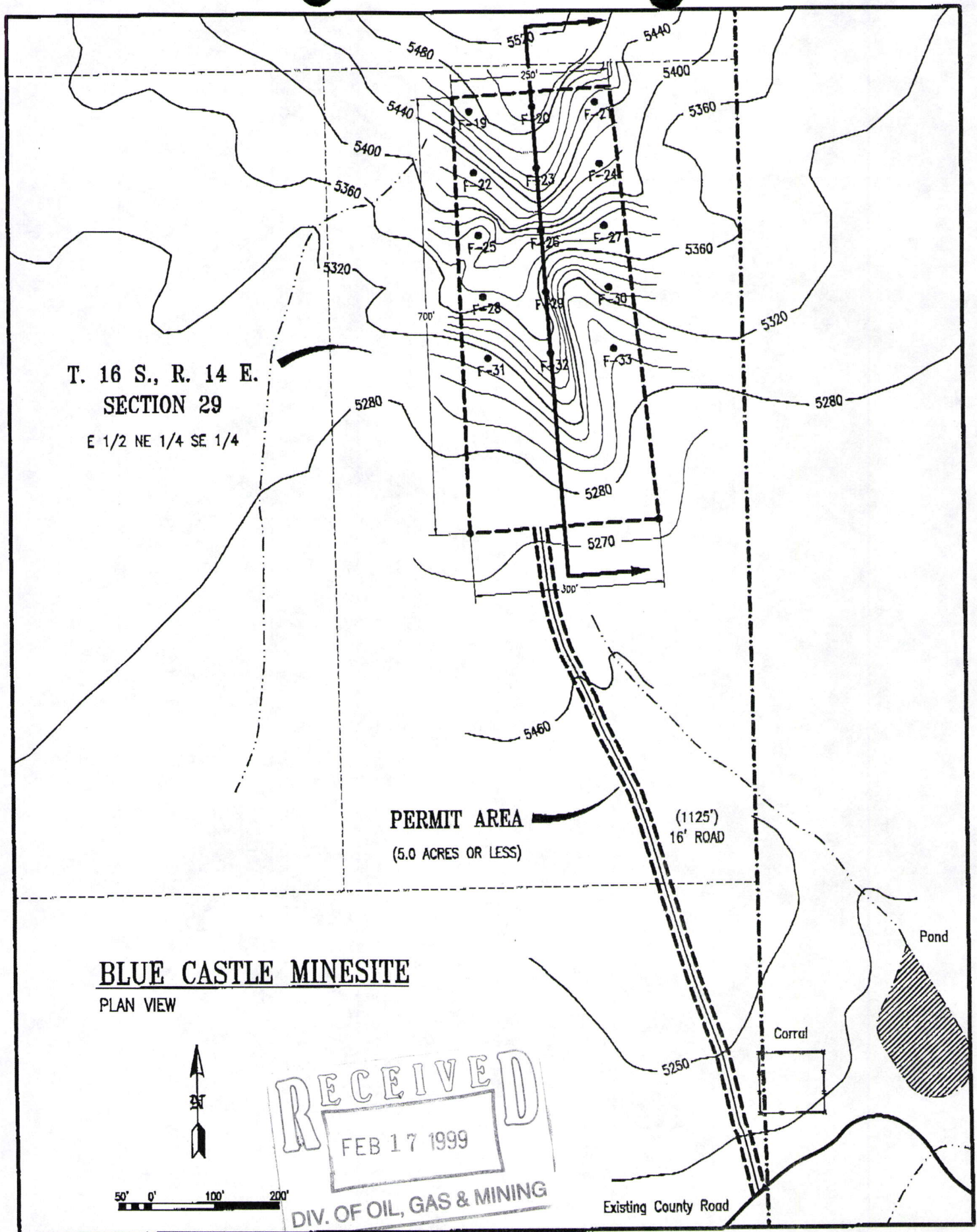
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2-17-99

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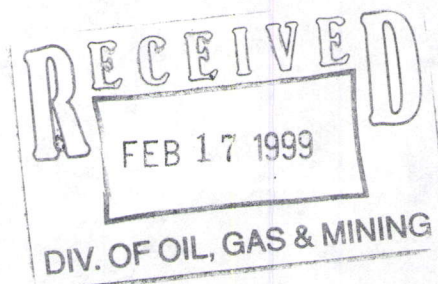
MESSAGE:

Please let us know if  
you need any additional  
information.





5/015/077



CULTURAL RESOURCE INVENTORY OF THE  
BLUE CASTLE MINE SITE AND ACCESS ROAD  
EMERY COUNTY, UTAH

by

Keith R. Montgomery

Prepared For:

Bureau of Land Management  
Price River Resource Area Office  
Moab District

Prepared Under Contract With:

Blackhawk Engineering, Inc.  
Route 1 Box 146-H5  
Helper, Utah 84526

Prepared By:

Montgomery Archaeological Consultants  
P.O. Box 147  
Moab, Utah 84532

February 5, 1999

United States Department of Interior (FLPMA)  
Permit No. 98-UT-60122

State of Utah Antiquities Project (C

United States Department of Interior (FLPMA)  
Permit No. 98-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-99-MQ-0047b

## INTRODUCTION

A cultural resource inventory was conducted by Montgomery Archaeological Consultants (MOAC) for the proposed Blue Castle Mine Site in February, 1999. The project area is situated in Emery County approximately 17 miles southeast of the town of Price, Utah. The archaeological survey was implemented at the request of Dan W. Guy, President of Blackhawk Engineering, Inc., Helper, Utah. The inventory area occurs on public land administered by the Bureau of Land Management (BLM) Price River Resource Area (Moab District).

The objective of the inventory was to locate, document, and evaluate any cultural resources within the project area. Also, the inventory was implemented to attain compliance with a number of federal and state mandates, including the National Historic Preservation Act of 1966 (as amended), National Environmental Policy Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, American Indian Religious Freedom Act of 1978, and the Utah State Antiquities Act of 1973 (amended 1990).

The fieldwork was performed by Keith R. Montgomery on February 3, 1999 under the auspices of U.S.D.I. (FLPMA) Permit No. 98-UT-60122 and State of Utah Antiquities Permit (Survey) No. U-99-MQ-0047b, issued to Montgomery Archaeological Consultant, Moab, Utah. A file search for previous surveys and documented archaeological sites was performed by the author at the BLM Price River Resource Area Office (February 3, 1999). This consultation indicated that in 1981 a survey was performed by the University of Utah Archaeological Center for the Kaiser Steel South Lease Mine property (Rauch 1981). A number of prehistoric and historic sites were documented during this project including a test excavation at a rockshelter with Fremont and Numic components (42Em1343). No previously-documented cultural resources occur in the immediate project area.

## DESCRIPTION OF PROJECT AREA

The project area is situated on the east side of US 191 between Grassy Wash and Coleman Wash, in Emery County, Utah (Figure 1). The legal description is the E ½, NE ¼, SE ¼ of Township 16 South, Range 14 East, Section 29 (USGS 7.5' Lila Canyon, UT 1985 and Cedar, UT 1985).

In general, the project area lies within the Book Cliffs-Roan Plateau Physiographic Subdivision of the Colorado Plateau (Stokes 1986). The Book Cliffs form an almost continuous cliff face along the Tavaputs Plateau, broken by Horse Canyon situated just north of the inventory area. The geology of the project area is composed of Cretaceous period deposits which date from 144 to an estimated 78 million years ago (Ibid 1986:131). The lowlands west of the Book Cliffs consists of the Blue Gate shale member of the Mancos Shale group which are mainly marine sediments. The Cretaceous rocks yield a

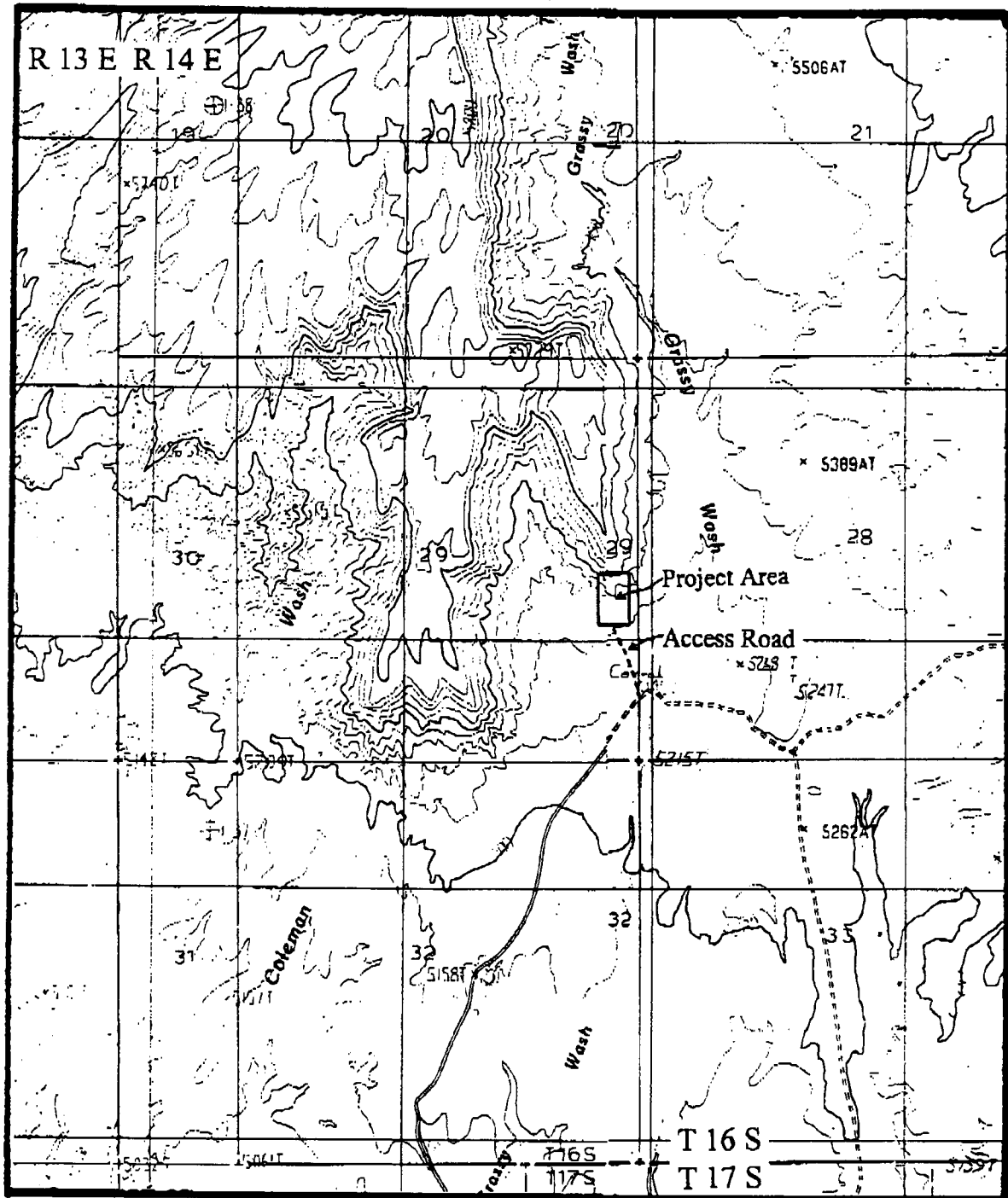


Figure 1. Inventory Area of the Blue Castle Mine Site with Access Road, Emery County, Utah. USGS 7.5' Cedar, UT 1985 and Lila Point, UT 1985. Scale 1:24000.

notable record of both continental and marine vertebrates. Fish are represented chiefly by scales and teeth. The inventory area occurs south of The Cove along the margins of the Mancos lowlands and the foothills of the Book Cliffs. The nearest water source is Grassy Trail Creek located about 4 miles west of the project area. This is technically an intermittent drainage, although it contains water most of the year (Martin et al., 1983). The elevation of the inventory area ranges from 5220 to 5400 feet. The project area lies within a Desert Shrub Association dominated by shadscale, four-wing saltbrush, mat saltbrush, snakeweed, and prickly pear cactus. Landscape disturbances consist of two track roads, livestock grazing, and a out-of-period corral.

### SURVEY METHODOLOGY

The archaeologist was accompanied to the field by personnel of Environmental Industrial Services (EIS) and the engineer (Dan W. Guy) who delineated the flagged and staked project perimeters. An intensive or 100% survey coverage was conducted by the archaeologist. The archaeologist walked parallel and zig-zag transects along a 100 foot corridor access road and survey block spaces no more than 10 meters (30 feet) apart. The inventory area included a 1000 foot access road and a block parcel measuring 700 feet north-south by 400 feet east-west. A total of 8.7 acres was inspected for this project situated on public lands administered by the BLM Price River Resource Area (Moab District).

### RESULTS AND RECOMMENDATIONS

The inventory of the Blue Castle Mine Site resulted in the identification of a small twin post and rail corral situated along the east side of the proposed access road. The author consulted the range files at the BLM Price Resource Area which indicated the livestock corral was built in 1963. Hence, the historic feature is considered out-of-period.

Based on the findings, a determination of "no effect" to Section 106, CFR 800 is recommended for this project.

### REFERENCES CITED

Martin, Cutis W., Harley J. Armstrong, Sally M. Crum, Barbara J. Kutz,  
and Lester A. Wheeler

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No. 15. Salt Lake City, Utah.

Rauch, Rebecca

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Stokes, William Lee

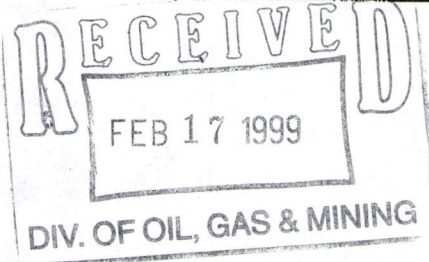
1986 Geology of Utah. Utah Museum of Natural History, University of Utah, Salt  
Lake City.



5/015/077

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## Threatened and Endangered Species Inventory Blue Castle Mine GoldTerra

On February 3, 1999 EIS Environmental and Engineering Consulting performed a threatened, endangered & sensitive (TES) inventory of the proposed road (approximately 700 feet) and the proposed mine site (approximately five acres) for the Blue Castle Mine located in Emery County, Utah. (See attached Figure 1). The inventory was conducted by Mel A. Coonrod and David Steed from the firm of EIS located in Helper, Utah.

The road centerline was flagged on-site. An area of 50 feet on each side of the centerline was inventoried. The mine site was identified on the ground by wooden lath with pink flagging. The entire site, including an additional 25 feet buffer zone, was inventoried.

The following plant species have been identified as potential inhabitants of this area. Of the plants listed below, none were located within the proposed area of disturbance.

-catseye crypantha	<i>Cryptantha creuzfeldtii</i>
-canyon sweetvetch	<i>Hedysarum occidentale</i>
-cactus	<i>Sclerocactus</i>
-foot cactus	<i>Pedoecactus despainii</i>

Animal species that were specifically identified as potential inhabitants of this area are as follows:

-ferringenous hawk	<i>Buteo regalis</i>
-golden eagle	<i>Aquila chrysaetos</i>
-burrowing owl	<i>Athene cunicularia</i>

The entire area of disturbance was inventoried as well as and additional 25 feet buffer zone around the proposed mine site. No evidence of the above listed species were observed.

**-PAGE TWO-  
TES INVENTORY**

Three burrows were located, one of which appeared to be active.(See Exhibit 1) There was no evidence of black-footed ferret or burrowing owl activity at this site. The habitat was not suitable for loggerhead shrike nesting. No shrubs or trees of sufficient height are located in or near the proximity of the proposed area of disturbance. (See exhibit 2).

A raptor inventory was conducted in the spring of 1998 by Utah Division of Wildlife Resources and EIS personnel. No active or tended nests of any raptors were observed within a one- mile radius of the proposed mine site. However, the pinyon-juniper bench to the west was not inventoried for the nesting raptors. The inventory was concentrated on the escarpment and rubble strewn slopes adjacent to the mine location.

**CONCLUSIONS:**

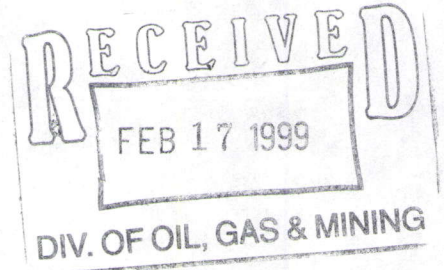
Based on the above inventory, no listed TES species were located within the area of potential disturbance.



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5/015/077

**VEGETATION INVENTORY  
BLUE CASTLE MINE  
GoldTerra**

On February 3, 1999 E.I.S. conducted a vegetation inventory for the proposed Blue Castle Mine site. Mel Coonrod and David Steed conducted the inventory.

The area was divided into two separate units. Unit A: Vegetated area and Unit B: Bare Mancos. (See exhibit 1, Unit A and exhibit 2, Unit B.) The bare Mancos area was devoid of any vegetation, therefore Unit B is not considered relative to species lists or productivity.

Unit A has relatively poor productivity, estimated at approximately 100 pounds per square acre. The soil is largely weathered mancoese with a scattering of sandstone flakes. The total depth of both A and B horizons averages less than 3 inches in most areas.

A total inventory of the area was conducted. Follows is a list of species which were identified:

**GRASSES:**

Galleta  
Needle & Thread  
Indian Rice Grass

*Hilaria jamesii*  
*Stipa comata*  
*Oryzopsis hymenoides*

**-PAGE TWO-  
VEGETATION INVENTORY**

**FORBS:**

Penstemon	<i>Penstemon sp.</i>
Chrysothamnus	<i>Chrysothamnus nauseosus</i>
Snakeweed	<i>Gutierrezia sarothrae</i>
Juniper globe mallow	<i>Sphaeralcea digitata</i>
Cactus	<i>Sclerocactus sp.</i>
Prickly pear cactus	<i>Opuntia polyacantha</i>
Halogeton	<i>Halogeton glomeratus</i>

**SHRUBS:**

Fourwing saltbush	<i>Atriplex canescens</i>
Mat saltbush	<i>Atriplex corrugata</i>
Winterfat	<i>Krascheninnikovia lanata</i>
Rubber rabbitbrush	<i>Chrysothamnus nauseosus</i>
Shadscale	<i>Atriplex confertifolia</i>

Representative photos are attached as Exhibits 3-10.

TES INVENTORY  
BLUE CASTLE MINE  
SITE PHOTOGRAPHS



Exhibit # 1

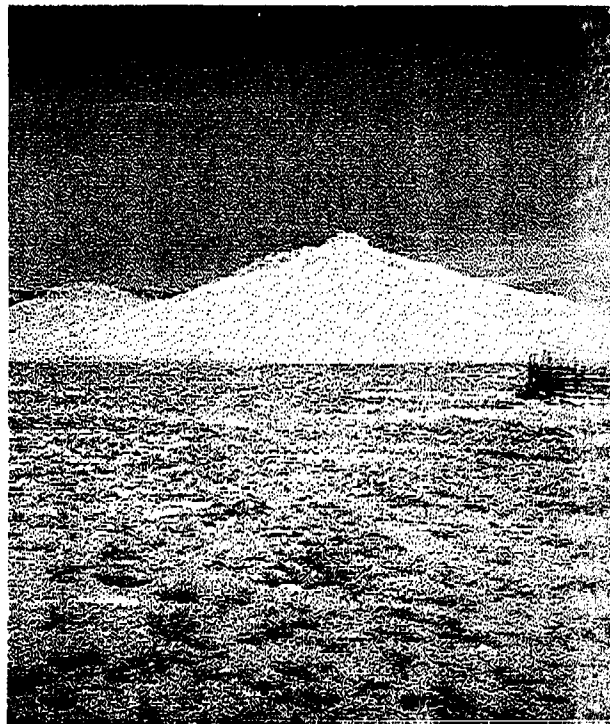


Exhibit #2



VEGETATION INVENTORY  
BLUE CASTLE MINE  
SITE PHOTOGRAPHS



Exhibit # 1

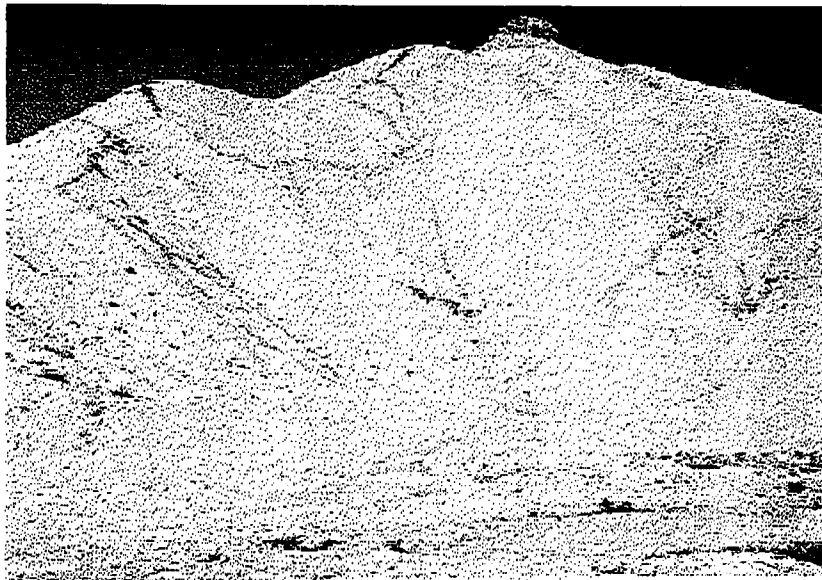


Exhibit # 2

VEGETATION INVENTORY  
BLUE CASTLE MINE  
SITE PHOTOGRAPHS

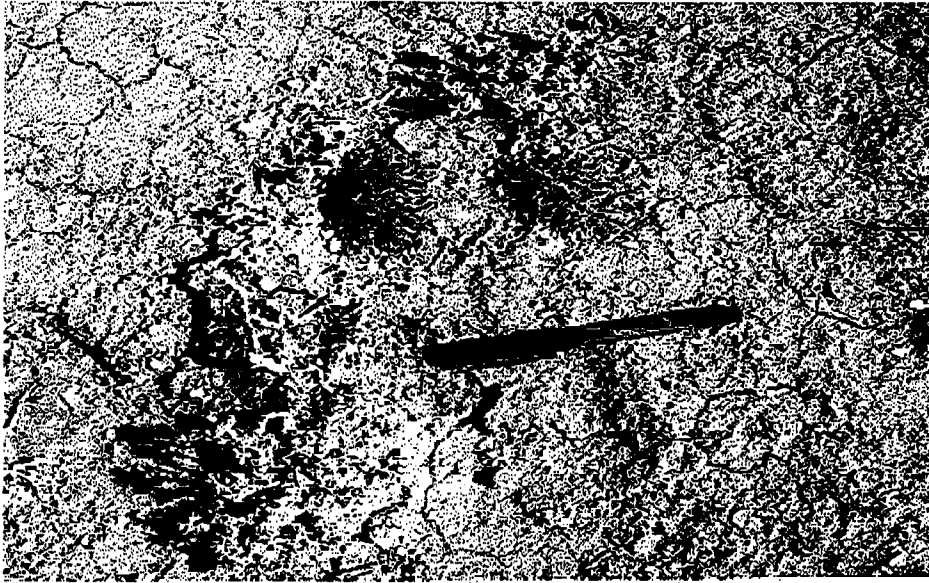


Exhibit # 3 Chrysothamnus

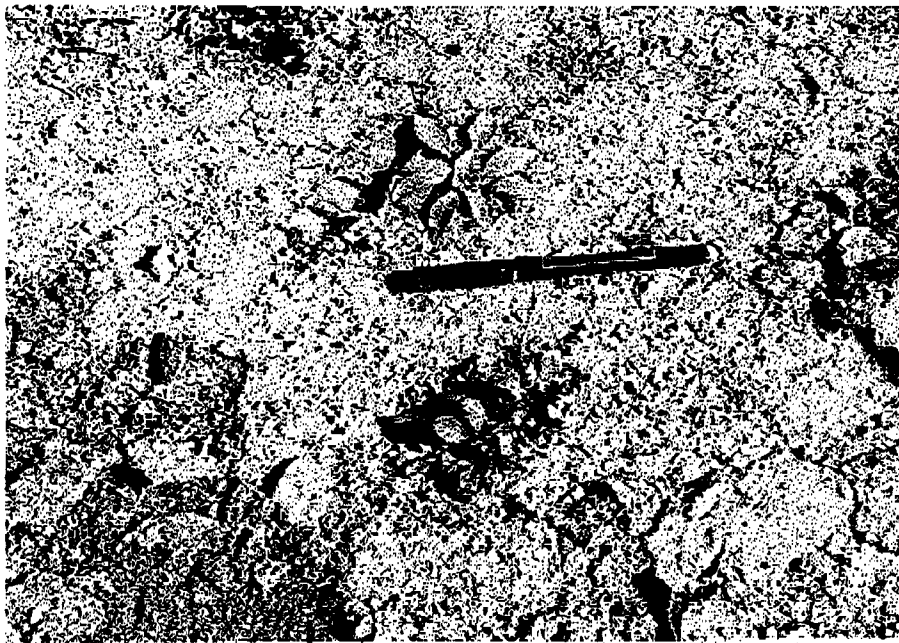


Exhibit # 4 Penstemon

VEGETATION INVENTORY  
BLUE CASTLE MINE  
SITE PHOTOGRAPHS

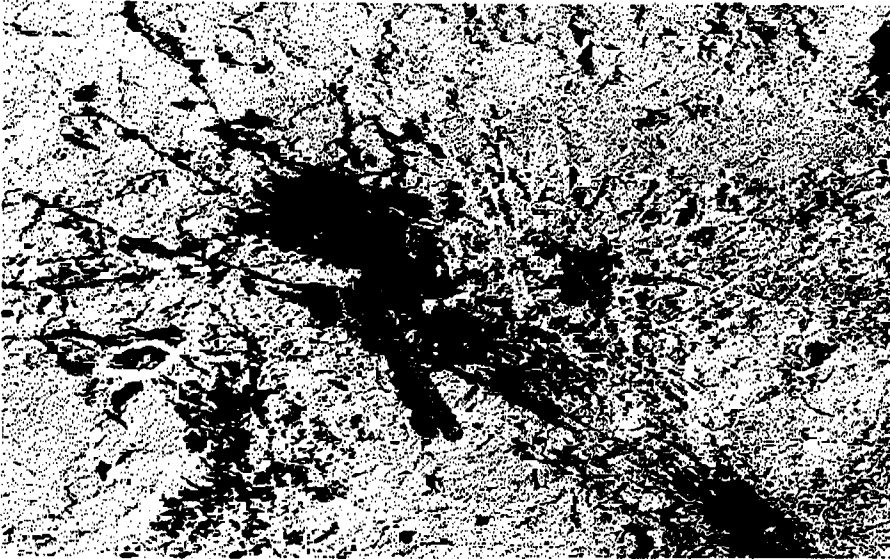


Exhibit # 5 Globe mallow



Exhibit # 6 Needle & thread grass

VEGETATION INVENTORY  
BLUE CASTLE MINE  
SITE PHOTOGRAPHS

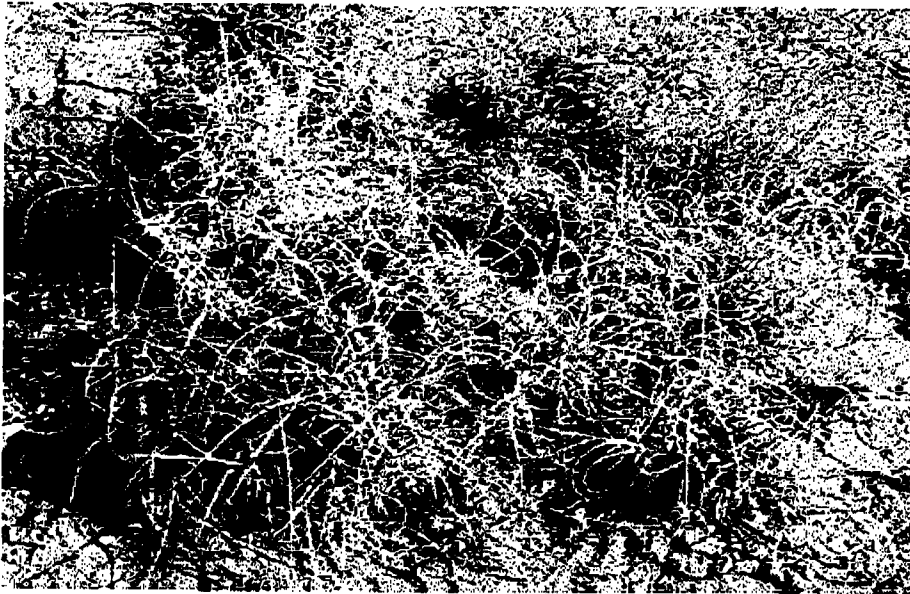


Exhibit # 7 Galleta



Exhibit # 8 Snakeweed

VEGETATION INVENTORY  
BLUE CASTLE MINE  
SITE PHOTOGRAPHS



Exhibit # 9 Fishhook cactus

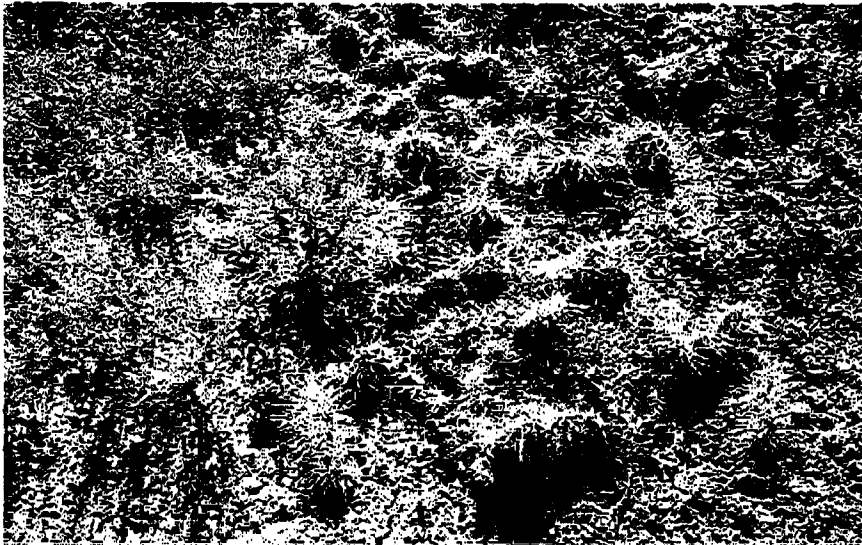


Exhibit # 10 Prickly pear cactus